

What we claims is:

1. Fibers melt-spun from a thermoplastic alternating copolymer composed of alkenes and carbon monoxide having a

- tenacity $BT > 900 \text{ mN/tex}$,
- melting point $T_m > 220^\circ\text{C}$,
- crystallinity $V_c > 33\%$, and
- birefringence $\Delta n > 0.0550$.

2. Fibers melt-spun from a thermoplastic alternating copolymer composed of alkenes and carbon monoxide having a

- tenacity $BT > 1000 \text{ mN/tex}$,
- melting point $T_m > 220^\circ\text{C}$,
- crystallinity $V_c > 35\%$, and
- birefringence $\Delta n > 0.0570$.

3. Fibers melt-spun from a thermoplastic alternating copolymer composed of ethylene/propylene and carbon monoxide and with a propylene content between 4 and 0.5 mole%, calculated on ethylene, having a

- tenacity $BT > 1000 \text{ mN/tex}$,
- melting point $T_m > 240^\circ\text{C}$,
- crystallinity $V_c > 40\%$, and
- birefringence $\Delta n > 0.0570$.

4. A process for preparing fibers from a thermoplastic alternating copolymer composed of alkenes and carbon monoxide, in which the process comprises melt-spinning the copolymer and subsequently drawing the resulting fibers, wherein the melt-spinning process is conducted with a polymer melt free of crystallization nuclei at a temperature of at most 40K above the melting temperature of the polymer T_m (in K) and the drawing of the fibers is conducted at a temperature in the range of $T_{mc} - 15\text{K}$ to $T_{mc} - 90\text{K}$, with T_{mc} representing the constrained melting temperature, at a draw ratio in the range of 5 to 12 and a drawing tension corrected for temperature $DT_{d,corr}$ in the range of 105 to 300 mN/tex,

$$DT_{d,corr.} = \frac{F_{DR} \cdot DR}{tex \left[e^{\frac{(1000/T_d)}{0.8}} - e^{\frac{(1000/T_{m.})}{0.8}} \right]}$$

wherein F_{DR} represents the force measured at a draw ratio DR (in mN) and T_d represents the drawing temperature (in K), the calculation of the drawing tension corrected for temperature including a linear density of the fibers prior to starting of the drawing.

5 5. A process according to claim 4, wherein the draw ratio is at least 7 and the drawing tension corrected for temperature is in the range of 120 to 280 mN/tex.

10 6. A process according to claim 4, wherein the fibers obtained following the process have a tenacity (in mN/tex) in the range of $313\ln(DT_{d,corr.}) - 575$ to $313\ln(DT_{d,corr.}) - 755$.

15 7. A process according to claim 4, wherein the drawing tension corrected for temperature $DT_{d,corr.}$ is more than 140 mN/tex, and wherein the fibers obtained following the process have a tenacity of more than about 900 mN/tex.

8. A process according to claim 4, wherein the alternating copolymer contains ethylene.

9. A process according to claim 8, wherein in the alternating copolymer, 80 to 100% of the alkene units are composed of ethylene.

20 10. A process according to claim 4, wherein the alternating copolymer is composed of ethylene/propylene and carbon monoxide and with a propylene content between 4 and 0.5 mole %, calculated on ethylene.

11. A rubber article containing the fibers according to claim 1.

12. A tire containing the fibers according to claim 1.

25 13. The tire according to claim 12, wherein the tire is a car tire.

14. A tire containing the fibers made according to the process of claim

4.

15. A rubber article containing the fibers made according to the process of claim 4.